

Claims

I claim:

A method of inhibiting the development of opioid tolerance by
5 clinically administering a chemically combination of a
pharmacologically active form of substance P with morphine in a
chimeric hybrid molecule wherein morphine, chemically modified and
covalently linked through its 6'OH group, comprises a cyclic
alkaloid moiety which binds as an agonist to a mammalian or human
10 mu (μ) opioid receptor; and wherein a pharmacologically active C-
terminal substance P fragment, chemically modified and covalently
linked through its free NH₂ group, comprises a peptide moiety
which binds as an agonist to a mammalian/human substance P
receptor; and wherein a compact, but flexible, molecular hinge
15 covalently cross links morphine through its 6'OH group to the free
NH₂ group of the substance P receptor agonist moiety, so as to
allow both the mu (μ) opioid receptor and the substance P receptor
agonist moieties to activate their respective receptors
simultaneously and independently.